## ABSTRACT OF THE DISCLOSURE

An exposure apparatus in which exposure process is performed by projecting an exposure beam of X-rays or ultraviolet rays from an excimer laser, for example, to a substrate, is provided with an arrangement wherein an inert gas containing a small amount of oxygen is supplied to a closed space where an optical element is disposed, and wherein the exposure beam is projected thereto by which ozone is produced in the closed space. Organic compound deposited on the optical element can be removed by photochemical reaction through projection of the exposure beam and the produced ozone.